

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G02B6/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	US 5 542 020 A (HORSKA JANA) 30 July 1996 (1996-07-30) abstract; figures 3,4,10-12 column 14, line 38 - line 51 column 8, line 58 -column 9, line 17 ---	1
A	US 6 389 787 B1 (SMITH DAVID H ET AL) 21 May 2002 (2002-05-21) abstract; figure 1 ---	1,5
A	US 6 205 277 B1 (MATHIS TERRY D ET AL) 20 March 2001 (2001-03-20) abstract; figure 5 column 7, line 51 - line 67 ---	2,5

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *L* earlier document but published on or after the international filing date
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- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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S document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
2 October 2003	13/10/2003
Name and mailing address of the ISA European Patent Office, P.O. 5818 Patenttaan 2 NL - 2280 HV Rijswijk Tel: +31 70 340-2640, Tx: 91 611 3801 Fax: +31 70 340-3015	Authorized officer Faderl. [

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 5 536 528 A (HAMADA KAZUHIRO ET AL) 16 July 1996 (1996-07-16) abstract; figures 2,3,7 column 3, line 60 -column 4, line 50 ---	2,5
A	US 4 129 468 A (KNAB EMIL D) 12 December 1978 (1978-12-12) abstract: figures 1,3 ---	5

INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR 03/01823

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